



EUROPEAN PATENT APPLICATION

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Biocide composition and use.

A composition which contains a 4,5-polymethylene-4-isothiazolin-3-one and either a 2-halo-2-halomethylglutaronitrile or a defined isothiazolinone which is different from the 4,5-polymethylene-4-isothiazolin-3-one and which can be a 4,5-optionally halogenated N-alkyl isothiazolin-3-one. The compositions exhibit anti-microbial activity and certain combinations are surprisingly effective against bacteria.



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EUROPEAN SEARCH REPORT

Application Number

EP 91 30 3276

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	GB-A-2 208 474 (IMPERIAL CHEMICAL IND. PLC) * Page 1, line 3 - page 4, line 21; page 6, lines 6-31; claims 1,2,6,8 * ---	1-6,10-16,18	A 01 N 43/80 // (A 01 N 43/80 A 01 N 43:80 A 01 N 37:34)
D,A	GB-A-2 087 388 (CENTRE INTERNATIONAL DE RECHERCHES DERMATOLOGIQUES CIRD) * Page 1, line 5 - page 2, line 25 * ---	1-6,10	
A	EP-A-0 196 452 (CALGON CORP.) * Column 1, line 1 - column 2, line 53; column 3, lines 42-52 * ---		
A	EP-A-0 098 410 (MERCK & CO. INC.) * Page 1, lines 9-22; page 5, line 6 - page 7, line 16 * ---		
A	PATENT ABSTRACTS OF JAPAN, vol. 9, no. 134 (C-285)[1857], 8th June 1985; & JP-A-60 19 704 (HOKKO KAGAKU KOGYO K.K.) 31-01-1985 * The whole abstract * -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A 01 N
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 09-08-1991	Examiner MUELLNERS W.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid,
namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions,
namely:

See sheet -B-

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid,
namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims,
namely claims: 4-6,16 and 1-3,10-15,18 partially



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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 4-6, 16 (completely)
1-3, 10-15, 18 (partially)

A composition which comprises:

a) a least one 4,5-polymethylene-4-isothiazolin-3-one or a derivative thereof, and

b) at least one 2-halo-2-halomethyl glutaronitrile,

a medium containing this composition

and a method for inhibiting the growth of microorganisms comprising treating a medium with this composition or with components a) and b) sequentially.

2. claims: 7-9, 17 (completely)
1-3, 10-15, 18 (partially)

A composition which comprises:

a) a least one 4,5-polymethylene-4-isothiazolin-3-one or a derivative thereof, and

b) at least one isothiazolin-3-one derivative which does not contain a fused ring attached to the isothiazole ring

a medium containing this composition

and a method for inhibiting the growth of microorganisms comprising treating a medium with this composition or with components a) and b) sequentially.